

**ABSTRACT****Bus System having Improved Control Process**

5 The invention provides a bus system comprising a controller (1); a  
high speed data transfer bus (2), the data transfer bus being  
subject to one or more inherent physical-layer configuration  
constraints for proper electrical operation; and a separate control  
bus (14). Several devices are connected to the controller through  
10 the control bus and the data transfer bus. The controller is  
arranged to communicate with devices using the control bus in order  
to verify whether or not one or more of the physical-layer  
configuration constraints are satisfied. If such configuration  
constraints are not satisfied, the controller modifies the operation  
15 of some of the devices using control signals transmitted on the  
control bus in order to bring the data transfer bus to an operable  
condition.

The invention makes it possible to use the bus system, even though  
20 physical-layer configuration constraints are violated. The  
invention applies to Rambus DRAM buses, where devices may be  
disabled to ensure respect of the constraint on the number of  
devices.

25 Figure 3.